THE LANCET Public Health

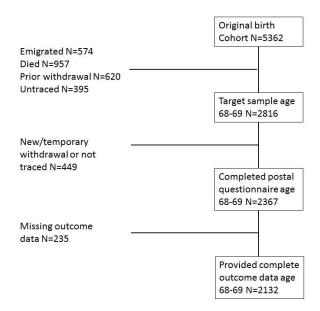
Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Stafford M, von Wagner C, Perman S, Taylor J, Kuh D, Sheringham J. Social connectedness and engagement in preventive health services: an analysis of data from a prospective cohort study. *Lancet Public Health* 2018; published online Aug 21. http://dx.doi.org/10.1016/S2468-2667(18)30141-5.

WEB EXTRA MATERIAL

Supplementary Figure 1. Flow chart



Supplementary Table A. Pairwise polychoric correlation coefficients

| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 1.Married | 0.01 | 0.29 | 0.00 | 0.25 | -0.26 | 0.08 | 0.10 | -0.05 | -0.06 |
| 2.Network size | 1.00 | 0.16 | -0.46 | 0.21 | 0.14 | 0.10 | 0.05 | 0.05 | -0.03 |
| 3.Children | | 1.00 | -0.38 | 0.02 | -0.26 | -0.08 | 0.03 | 0.03 | 0.01 |
| 4. Contact | | | 1.00 | -0.30 | -0.07 | -0.11 | 0.06 | -0.03 | 0.02 |
| 5. Quality | | | | 1.00 | -0.10 | 0.06 | 0.09 | -0.05 | -0.03 |
| 6.Female | | | | | 1.00 | -0.18 | -0.07 | -0.28 | 0.13 |
| 7.Education | | | | | | 1.00 | 0.55 | 0.12 | -0.07 |
| 8.Social class | | | | | | | 1.00 | 0.10 | -0.01 |
| 9.Employed | | | | | | | | 1.00 | -0.12 |
| 10. GP | | | | | | | | | 1.00 |
| consultations | | | | | | | | | |

Network size, relationship quality, education, social class and GP consultations are coded low to high in this Table.

Supplementary Table B. Gender-stratified association between social connectedness and risk of non-participation in preventive health services at age 68-69. Each connectedness indicator is entered in model singly (not mutually adjusted)

| | Incident rate ratio for non-participation (95% CI) ^b | | P for gender x connectedness interaction |
|---------------------------------------|---|-------------------|--|
| | Men (n=1022) | Women (n=1110) | |
| Marital status | | | 0.54 |
| Not married/cohabiting | 1 | 1 | |
| Married/cohabiting | 0.69 (0.59,0.82) | 0.83 (0.73.0.94) | |
| Social network size ^a | | | 0.57 |
| 0-2 | 1.44 (1.18,1.75) | 1.46 (1.22,1.75) | |
| 3-5 | 1.25 (1.04,1.50) | 1.05 (0.89, 1.24) | |
| 6-10 | 1.12(0.92,1.37) | 1.01 (0.85, 1.20) | |
| 11+ | 1 | 1 | |
| Parental status | | | 0.96 |
| Has child(ren) | 0.81 (0.68,0.95) | 0.79 (0.67,0.94) | |
| Does not have children | | | |
| Face-to-face contact (z-score) | 0.91 (0.85,0.96) | 0.91 (0.86,0.97) | 0.89 |
| Social relationship quality (z-score) | 0.86 (0.81,0.92) | 0.95 (0.89,1.00) | 0.07 |

^aNumber of relatives and friends seen once a month or more

^bAdjusted for gender, education, occupational class, employment status, doctor diagnosed chronic illnesses, number of GP consultations for health problems in last 12 months; bold indicates p<0.05

$Supplementary\ Table\ C.\ Socioeconomic\ characteristics,\ chronic\ disease,\ GP\ consultations\ for\ a\ health\ problem\ and\ risk\ of\ non-participation\ in\ preventive\ health\ services\ at\ age\ 68-69$

| | Incident rate ratio for non- |
|------------------------------------|------------------------------|
| | participation (95% CI) |
| | Mutually adjusted |
| Men | 1 |
| Women | 1.06(0.97,1.16) |
| Educational attainment | 1 00 (0 51,1 10) |
| No formal qualifications | 1 |
| Ordinary secondary | 0.74 (0.66,0.83) |
| Advanced secondary | 0.70(0.62,0.79) |
| Higher education | 0.69 (0.58,0.82) |
| Occupational class | ` , , |
| Managerial/professional | 1 |
| Skilled non-manual | 0.97 (0.82, 1.15) |
| Skilled manual | 1.17 (1.03,1.33) |
| Semi- and unskilled manual | 1.13(0.97,1.32) |
| Employment status | |
| Not in paid work | 1 |
| In paid work | 1.24 (1.12,1.37) |
| Doctor diagnosed conditions | |
| Angina | 0.76 (0.62, 0.95) |
| Hypertension | 0.75 (0.68, 0.82) |
| Diabetes | 0.70 (0.60,0.82) |
| Number of GP consultations in | |
| past 12 months | |
| 0 | 1 |
| 1-5 | 0.67 (0.61,0.73) |
| 6+ | 0.59 (0.50,0.69) |
| h = 1 d : = d: = = 4 = = = = 0 O F | |

bold indicates p<0.05

Supplementary Table D. Social connectedness and risk of non-participation in individual preventive health services at age 68-69 excluding prevalent health condition

| _ | | | | | | |
|----------------------------------|---------------------------------|-------------------|-------------------|------------------|--|--|
| | Likelihood of non-participation | | | | | |
| | Blood pressure | Cholesterol | Bowel cancer | Mammogram | | |
| | measurement; | measurement | screen | _ | | |
| | n=1282 | n=1932 | n=2041 | n=1201 | | |
| | OR (95% CI) | OR (95% CI) | OR (95% CI) | OR (95% CI) | | |
| Marital/cohabitation status | | | | | | |
| Married | 1 | 1 | 1 | 1 | | |
| Not married | 1.30 (082,2.04) | 1.02 (0.90,1.15) | 1.55 (1.21,2.00) | 1.52 (1.02,2.27) | | |
| Social network size ^a | | | | | | |
| 0-2 | 1.92 (1.07, 3.46) | 1.98 (1.37,2.87) | 1.83 (1.30,2.56) | 1.41 (0.80,2.49) | | |
| 3-5 | 1.13 (0.64,1.20) | 1.59 (113,2.22) | 1.38 (1.01,1.89) | 1.10 (0.65,1.84) | | |
| 6-10 | 1.43 (0.81,2.51) | 1.10 (0.77, 1.57) | 1.23 (0.89,1.71) | 0.92 (0.54,1.56) | | |
| 11+ | 1 | 1 | 1 | 1 | | |
| Any children | | | | | | |
| Yes | 1 | 1 | 1 | 1 | | |
| No | 1.23 (0.74,2.08) | 1.32 (0.95,1.85) | 1.41 (1.05,1.89) | 1.02 (0.57,1.82) | | |
| Face-to-face contact (z- | | | | | | |
| score) | 0.84 (0.43, 1.66) | 0.78 (0.69, 0.87) | 0.88 (0.80,0.98) | 0.93 (0.77,1.11) | | |
| Social relationship quality | | | | | | |
| (z-score) | 0.89(0.74,1.07) | 0.95(0.84,1.07) | 0.85 (0.77, 0.95) | 0.92 (0.76,1.11) | | |

^aNumber of relatives and friends seen once a month or more

Each social connectedness indicator is entered in model singly, adjusted for gender, education, occupational class, employment status, doctor diagnosed chronic illnesses, number of GP consultations for health problems in last 12 months